# DE35-HD
# Sales kit

V0.2

Open Mind & Global Vision

# Introduction

- DE35-HD is AMD Fusion platform with low power CPU and high performance 3D graphics engine, it is good for digital signage application because it high graphic performance and low power consumption and low cost
- CPU and chipset of DE35-HD is AMD Embedded G-series  platform, the life cycle with planned availability of at least 5 years

# Target Market

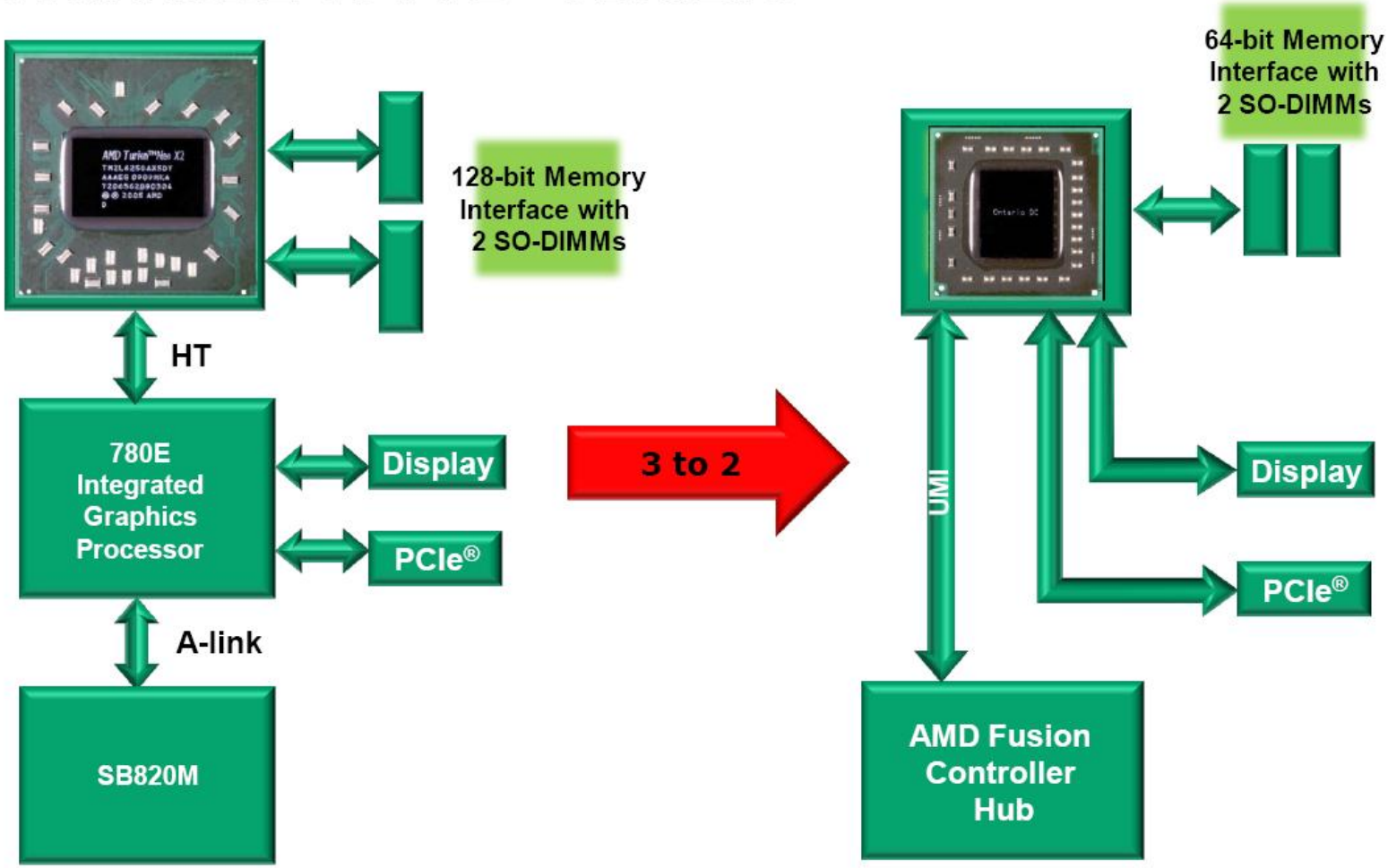
- **DE35-HD is designed for digital signage application. Typical application like:**
  - Indoor venues: restaurants, hotel, casino, movie theaters, museums, stadiums, health cares..
  - Corporate: point of information signage in lobby, conference room
  - Education: information displays, campus bulletin board, information monitors, conference and training room signage.

# Product Feature

- **World class integrated ATI graphics core with DirectX®11 support**
- **Updated Unified Video Decoder 3 (UVD) core provides HW accelerated decode of H.264, VC-1 and MPEG-2 content**
- **Supporting DDR3 memory up to DDR3-1066**
- **Supporting USB3.0 in rear USB x 2**
- **Standard SATA interface for HDD to increase reliability**
- **Rich I/O features and expandability**
  - RS232 x 1, Giga-LAN x 1, USB x 4, DP x 1, DVI(HDMI+VGA) x1
  - Support Optional Wireless, TV tuner card with Mini-card slot x1
- **Compact size and mounting solutions**
  - Optional VESA mounting kits
  - Optional Titan series - integrated display mounting solution with Digital Engine and cable management.

# Architectural

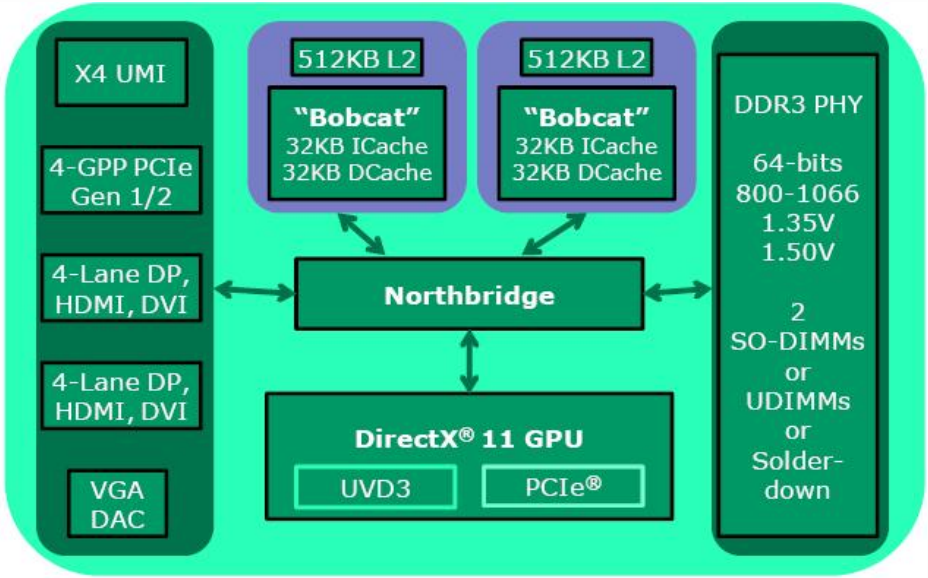
## AMD Fusion Architectural Physical Change from ASB2 to FT1 "eBrazos"



# CPU Features

## "eOntario" Features

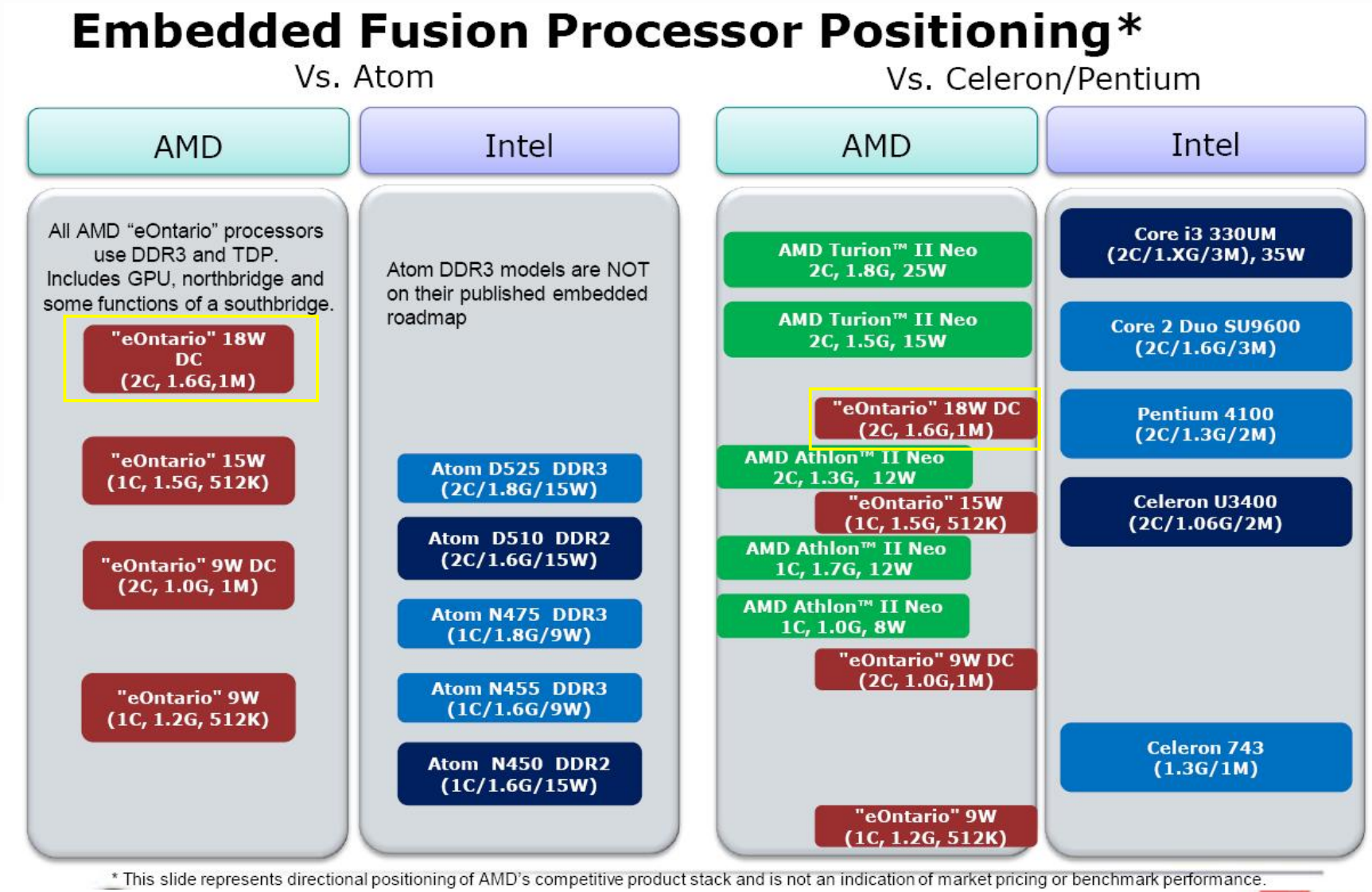
- Dual "Bobcat" core, 512KB L2 per core
- DirectX® 11 graphics, UVD3
- CC6, per core and GPU power gating
- x4 UMI to "Hudson-1" (PCIe® electricals)
- (4) PCIe Gen 1or 2 General Purpose Ports
- DDR3, single channel




| Interface | Description |
|---|---|
| LVDS | Single link LVDS (3 lane + clock) |
| DVI | Single link DVI (3 lane + clock); can support up to 1920 x 1200 @ 60Hz |
| HDMI™ | Single link HDMI |
| DP | DisplayPort (4 lane) |

| "eOntario" PCI Express® Lanes (8 Total) | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| "Hudson-1" | | | | x4 GPP | | | |
| "Hudson-1" | | | | x2 GPP | | X2 GPP | |
| "Hudson-1" | | | | X2 GPP | | GPP | GPP |
| "Hudson-1" | | | | GPP | GPP | GPP | GPP |

# CPU position


Embedded Fusion Processor Positioning*
Vs. Atom
Vs. Celeron/Pentium
AMD
Intel
AMD
Intel
All AMD "eOntario" processors use DDR3 and TDP. Includes GPU, northbridge and some functions of a southbridge.
"eOntario" 18W DC (2C, 1.6G,1M)
"eOntario" 15W (1C, 1.5G, 512K)
"eOntario" 9W DC (2C, 1.0G, 1M)
"eOntario" 9W (1C, 1.2G, 512K)
Atom DDR3 models are NOT on their published embedded roadmap
Atom D525 DDR3 (2C/1.8G/15W)
Atom D510 DDR2 (2C/1.6G/15W)
Atom N475 DDR3 (1C/1.8G/9W)
Atom N455 DDR3 (1C/1.6G/9W)
Atom N450 DDR2 (1C/1.6G/15W)
AMD Turion™ II Neo 2C, 1.8G, 25W
AMD Turion™ II Neo 2C, 1.5G, 15W
"eOntario" 18W DC (2C, 1.6G,1M)
AMD Athlon™ II Neo 2C, 1.3G, 12W
"eOntario" 15W (1C, 1.5G, 512K)
AMD Athlon™ II Neo 1C, 1.7G, 12W
AMD Athlon™ II Neo 1C, 1.0G, 8W
"eOntario" 9W DC (2C, 1.0G,1M)
"eOntario" 9W (1C, 1.2G, 512K)
Core i3 330UM (2C/1.XG/3M), 35W
Core 2 Duo SU9600 (2C/1.6G/3M)
Pentium 4100 (2C/1.3G/2M)
Celeron U3400 (2C/1.06G/2M)
Celeron 743 (1.3G/1M)

* This slide represents directional positioning of AMD's competitive product stack and is not an indication of market pricing or benchmark performance.

# DE35-HD

## CPU

AMD embedded G series CPU Dual Core TDP 18W **T56N(1.6GHz) or T48N(1.4GHz)**

## CHIPSET

AMD FCH Hudson-E1 (A55E)

## MEMORY

DDRIII SO-DIMM 800/1066 x 2 up to 8GB (base on OS support)

## GRAPHICS

ATI HD Graphics Controller in CPU

## LAN

GbE LAN controller

## AUDIO

Realtek HD AUDIO CODEC ALC662

## EXPANSION SLOTS

mini Card slot x 1 (Full size support mSATA)

## Drive Bay

2.5” SATA 2 HDD x 1

## WDT

1 ~255 sec/min

## On Board I/O

USB x 2

Standard SATA connector

## Front Panel I/O

USB 2.0 port x 2

Power Button and Power, HDD indicator LED

## Rear Panel I/O

Display port x 1

DVI x 1 (include HDMI (with audio) x 1, VGA x 1)

USB 2.0 x 2,

USB 3.0 x 2

HD Audio 2 ports (Speaker out, Mic in)

GbE LAN RJ45 x 1

COM port x 1 (RS232)

DC **20/12V** connector (with 90W power adaptor)

## Form Factor

Cooler Supports up to TDP=18W CPU

166 (H) x 157.5 (L) x 48 (W) mm

Weight : T.B.D.

Volume : 1.25 liters

Housing material 0.8mm SECC

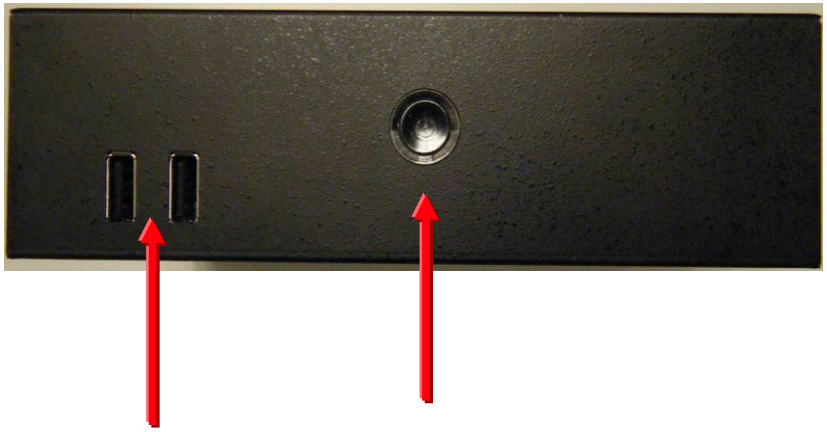
## Schedule

ES: WW22, ‘2011

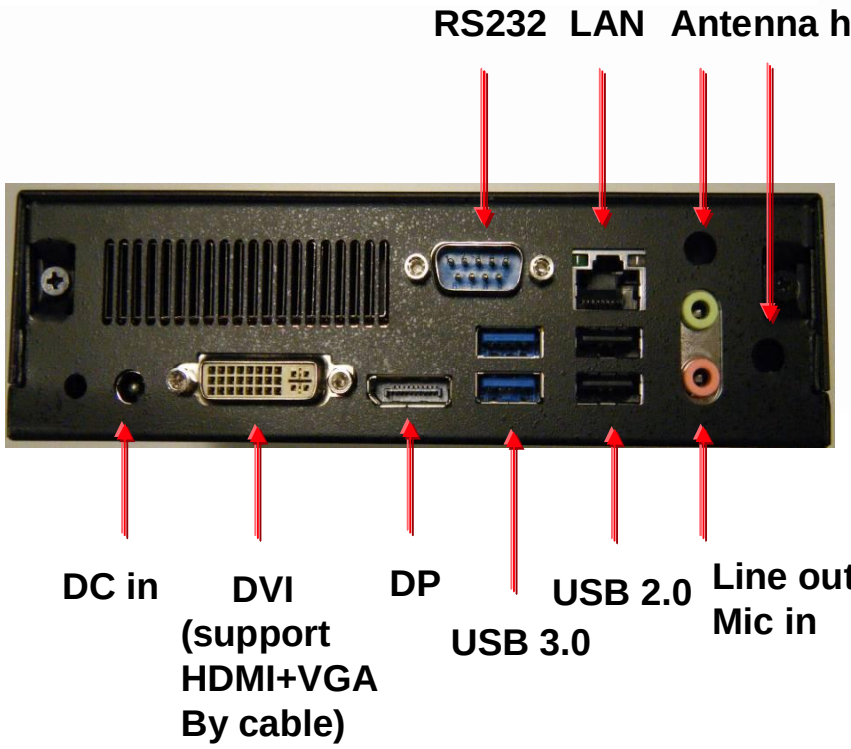
MP: WW26, ‘2011

# DE35-HD Photo

## Front I/O




## Rear I/O



# Accessory List

65W adapter

Power Cord

HDMI to DVI cable

L Type Holder

Power Clamp

Driver CD

Assembly Guide

Screw Kit

# Safety and Compliance

## EMC

- FCC*
- CE*
- EUP*

## DOC

- ROHS*

## Safety

- CB*
- UL*
- BSMI*(by request)
- CCC*(by request)

* Under Application